

BROOKHAVEN NATIONAL LABORATORY PHYSICS DEPARTMENT	Number: PO-OHS-02	Revision: 3
	Effective: October 18, 2005	Page 1 of 4
Subject: OHSAS 18001 Management Plan		
OHSManagementPlan_3.doc		
Prepared by: R. Gill	Reviewed by: M. Zarcone	Approved by: S. Dawson
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Physics Department OHS Management Plan

Department Activities Include: <ul style="list-style-type: none"> • Administrative and other “office-type” work • Fabrication and testing of scientific apparatus and detectors • Synthesis of chemicals and materials for subsequent study for CMP/MSD tenants in the Physics Building • Transportation of materials to other locations on or off site • Other activities related to, and necessary for, achieving programmatic goals 	
Hazards at Laboratories, Shops and Experimental Areas Include: <ul style="list-style-type: none"> • Hazardous or Toxic Materials • Electrical Energy • Flammable Gases and Liquids • High Temperatures • Cryogenic Temperatures • Ionizing Radiation • Non-Ionizing Radiation • Radioactive Materials • Operating Vehicles 	Hazards at Offices Include: <ul style="list-style-type: none"> • Housekeeping Hazards • Working Environment Hazards • Flammable or Combustible Materials • Electrical Energy • Operating Vehicles
Department Objectives Summary (See Section 4 for Details) <ol style="list-style-type: none"> 1. Reduce risk of exposure to legacy hazardous materials 2. Increase worker involvement in Job Risk Assessments 	
Department Targets Summary (See Section 4 for Details) <ol style="list-style-type: none"> 1.1. Reduce lead by disposing or recycling 1000 pounds of excess 2.1. Review 3 Job Risk Assessments for office jobs 2.2. Review 2 Job Risk Assessments for specific laboratory jobs 2.3. Review Job Risk Assessments for tasks associated with an injury 2.4. Create a matrix that relates Experiment Safety Reviews to Job Risk Assessments 2.5. Meet with all laser users to discuss safety issues 2.6. Meet with all compressed gas users to discuss safety issues 	

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1. Plan Description

The OHS Management Plan is comprised of a documented program of safety reviews, risk assessments and work planning. The Physics Department ES&H Committee is the primary instrument for documenting safety issues for new or modified experiments. The Physics Department ES&H Committee and the Group Safety Coordinators (GSC) perform the functions of the WOSH Committee. The Department buildings are inspected regularly for OSHA compliance via the Tier 1 process.

Day to day OHS issues and action items are addressed, as appropriate, through the safety review and work planning process documented in the [Physics Department's policies](#). Department managers are informed of issues and progress during weekly management meetings.

Housekeeping is a direct responsibility of all employees, and each employee is held accountable to do the things necessary to implement effective housekeeping.

The Self-Assessment (SA) program, Integrated Management Review, Tier I inspections, Facility-Area and Job Risk Assessments, and the annual OHS audit are also designed to help meet the FY06 objectives in this Plan. Integrated Management Review includes EMS and OHSAS reviews as well as BNL's SA requirements. Tracking and trending illness/injury rates as well as on time regulatory reporting contributes toward achieving OHS objectives and targets.

2. OHS Performance Indicator(s):

- Tier I inspection results
- Injury/Illness Rates
- The number of Occurrence Reports and Critiques dealing with OHS
- Completion of tasks listed in Section 4

3. Budget: Operating budget.

4. Structure, Authorities, Responsibilities:

Tasks, Person Responsible, Completion Dates

Objective 1: Reduce risk of exposure to legacy hazardous materials

- 1.1. During Tier 1 inspections, identify lead that has been stored for long periods or shows significant oxidation. Organize persons and equipment to safely move the lead to an area for pickup. Use waste management and the ECR as a resource to identify recycling opportunities and safe disposal paths. Remove 1,000 pounds of lead by the end of the third quarter of FY2006. M. Zarcone – 6/30/2006.

Objective 2: Increase worker involvement in Job Risk Assessments

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- 2.1. Historically, office-type work has been exempt from formal safety reviews. The goal is to involve more office workers by performing JRAs for office-style work. Examine current JRAs for specific tasks or jobs that have a high risk level. Select 3 of those and form a team, utilizing mostly persons who have not been involved on previous JRAs, to review the risk analysis. R. Gill – 9/30/06.
- 2.2. Form a team of workers to review two tasks or jobs that are normally carried out in a laboratory setting. The specific jobs will be selected based on consideration of the risk level, complexity and frequency of repetition of the task. The team should be composed of workers who perform the task, or similar tasks, and were not involved in prior JRAs. The objective is to involve new workers in the JRA process, but it is probably not possible for all members of the team to be “first-time” JRA team members. R. Gill – 9/30/06.
- 2.3. If an injury occurs, whether reportable or non-reportable, discuss the circumstances and review the JRA with the injured worker to determine if there are additional controls that could have prevented, or reduced the likelihood of, the injury. R. Gill – 9/30/06.
- 2.4. Provide a cross-reference, or matrix, of Experiment Safety Reviews and the JRAs that are relevant to the experiments described. Post the matrix on the Department’s ESR web page and provide a link to it from the Department’s OHSAS web page. R. Gill – 10/30/05.
- 2.5. Organize a meeting with all Physics Department personnel who use lasers to discuss safety and risk issues associated with experimental use of lasers. Review the JRA for laser use with the group. Using their feedback, modify the JRA if necessary. M. Zarcone – 4/30/06
- 2.6. Organize a meeting with all Physics Department personnel who use compressed gases to discuss safety and risk issues associated with experimental use of compressed gases. Review the JRA for compressed gas use with the group. Using their feedback, modify the JRA if necessary. M. Zarcone – 9/30/06

5. Vetting of OSH Objectives per Clause 4.3.3

Objective 1. Reduce risk of exposure to legacy hazardous materials

Impact	Evidence it was considered in setting objective
Legal and other requirements	We are required to provide a safe and healthy workplace. The presence of unneeded hazardous materials reduces our ability to comply with that directive.
OHS hazards and risks	Hazardous materials, especially lead, present a health risk for workers in areas where they are stored due to the potential for inhalation or absorption. Lead also presents a risk of muscular injury due to its high density and weight. Workers involved in the collection of these materials will have the risk of such exposure or injuries,

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	but will be provided with appropriate PPE and moving and lifting devices.
Technological options	Since the materials are identified as excess, no replacement (new technology) options are necessary. The materials can be slated for recycling or disposal.
Financial, operational & business requirements	The materials under consideration are excess and do not require a financial outlay for replacement. Lead will be recycled and will not incur a substantial cost.
Views of interested parties	This plan was discussed with and accepted by the Physics Department management.
Commitment to continual improvement	Removal of legacy hazardous materials will reduce potential exposure to harmful substances, reduce the risk that they accidentally enter and impact the environment, and reduce the likelihood of secondary injuries caused by moving these materials to facilitate work.

Objective 2. Increase worker involvement in Job Risk Assessments

Impact	Evidence it was considered in setting objective
Legal and other requirements	Worker involvement is the cornerstone of our OHSAS 18001 system, and is necessary to maintain our safety program.
OHS hazards and risks	The purpose is to identify the hazards and risks in a way that involves workers and positively affects their work habits. Because OHSAS risk assessments are part of this target, this target is directly addressed and completion will improve hazard risk assessments.
Technological options	N/A
Financial, operational & business requirements	The activities associated with this objective will take workers away from their normal jobs and will impact the Physics Department's productivity.
Views of interested parties	This plan was discussed with and accepted by the Physics Department management.
Commitment to continual improvement	Worker involvement will raise their awareness of hazards and risks, which will lead to better work practices and a safer workplace. It will also increase their familiarity with the management system, its components and requirements.